

### INFORMATION TECHNOLOGY DEPARTMENT POLICY NOTE – 2011-2012 DEMAND NO. 31

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### INFORMATION TECHNOLOGY DEPARTMENT

DEMAND NO. 31

# POLICY NOTE 2011-2012

R.B. UDHAYAKUMAR Minister for Information Technology

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### <u>CHAPTER – I</u>

### **OBJECTIVES**

Information Technology Department will strive to

- 1. Provide Government services, both informational and transactional, to Citizens at their door steps through the internet at the earliest;
- 2. Bridge the digital rural-urban divide;
- 3. Make Tamil Nadu the Best in IT enabled Governance;
- 4. Substantially increase the software exports of Tamil Nadu;
- 5. Provide Cable TV services to all households in Tamil Nadu at reasonable rates, at the earliest;
- 6. Take Computing in Tamil to a higher level;
- 7. Enhance the quality of life of Citizens through Information and Communication Technology.

### **INTRODUCTION**

Tamil Nadu has scientific and social infrastructure and the human resources, which are indispensably required for attracting IT investments. By harnessing the above resources completely, it becomes necessary to use ICT tools to extend the benefits offered by Government to the Citizens and take Tamil Nadu to an incomparable position in the Information Technology sector in India under the able guidance, dynamic leadership and futuristic vision of our Honourable Chief Minister.

Tamil Nadu is a front-runner among the States in India in ICT enabled Governance, by successfully implementing various e-Governance programmes of the State Government and also the schemes under the National e-Governance Plan (NeGP). Realising the basic needs of the common man, our Honourable Chief Minister, has planned to ensure that all services are made available to the common man in his locality through common service delivery outlets with efficiency, transparency and reliability.

The futuristic vision of our Honourable Chief Minister is to transform the present style of Governance and to adopt the Global Best Practices followed by the Corporate sector. At present Computers in Government departments are being used only for typing and email purposes. Though some Government departments have started providing online services, a totally modern style of Governance still remains elusive. e-Governance will not only improve delivery of services to citizens, business and employees, it will also engender re-engineering Government processes, making it more efficient and increasing transparency in how Government departments function. This will ultimately enable the transition of our society to an empowered society. At present, under the efficient and dynamic leadership of our Hon'ble Chief Minister plans are underway to take a giant stride towards providing transparent, efficient and speedy service in Governance by taking advantage of ICT tools.

Infusion of technology and bringing in world class ambience will naturally bring about a shift in attitude among our Government servants to work for and serve the citizens. The Information Technology Department will facilitate Government Departments in achieving their e-Governance objectives

The common man has to spend a substantial amount of time, money and energy in travelling to and from a Government office, to get his grievance redressed, which includes wage loss, and other incidental expenses. We should transform this scenario radically, if we are to achieve the obligations bestowed on Government by the Constitution. The vision of the Honourable Chief Minister is to ensure that the Citizen should not visit any Government office for any service rather he/she should be able to avail these services through the internet. Thus, the web should be the interface for the Citizen with the Government for availing routine Government Services. The Mantra for this transformation will be : "Minimize Citizen – Government Interaction".

Government will be shortly launching an e-Governance Policy reflecting the above initiatives.

The Honourable Chief Minister has taken all efforts to attract IT/ITES investments and development in Tamil

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Nadu so that the State attains the first place in the Country. The Honourable Chief Minsiter's vision is to IT/ITES substantially increase the exports. In the IT sector, there are approximately 200,000 employees representing 700 companies in the State. It is likely to grow by another 30% in the State during 2011-2012. 40,000 new students are expected to be recruited. In the ITES sector in Tamil Nadu, there are approximately 1,50,000 employees. Another 60,000 are expected to be recruited for ITES during 2011-2012. ITES Export will be around Rs.25,000 Crores during 2011-2012. There are about 1000 companies in ITES.

The Honourable Chief Minister is taking all efforts to ensure that Tamil Nadu rapidly becomes a global destination of choice for IT/ITES industries.

The Honourable Chief Minister is taking all steps to revive the Arasu Cable TV Corporation, which had become defunct and inactive, so as to provide cable TV services to all people at reasonable rates.

### <u>CHAPTER – II</u>

### ELECTRONICS CORPORATION OF TAMIL NADU LIMITED (ELCOT)

ELCOT is a wholly owned Government of Tamil Nadu Undertaking, registered under the Indian Companies Act, 1956. ELCOT began its activities as a promotional organization in the field of electronics industry and transformed itself to the Information Technology arm of Government of Tamil Nadu since the advent of the Information Technology revolution in India. ELCOT has been providing hand holding support to Government of Tamil Nadu and its Departments, Organizations, Boards, etc. in the area of Information Technology, e-Governance, providing internet Connectivity and Capacity Building.

ELCOT is the preferred nodal agency for hardware procurement, software development, major turnkey IT Projects of the Government, major projects of the Department of Information Technology, Government of India like Tamil Nadu State Wide Area Network (TNSWAN). It is also currently implementing another Government of India project, the State Data Centre (SDC).

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The Honourable Chief Minister has decided to distribute Free Laptops to students of Government and Government aided Higher Secondary Schools, Arts and Science Colleges, Engineering Colleges and Polytechnic Colleges which will be first of its kind and an exemplary role model not only for the country but also for the entire world.

The Honourable Chief Minister has assigned the task of procurement of Laptops under the prestigious scheme "Free distribution of Laptops to Students" to ELCOT considering their experience and performance in large-scale procurement.

# Computer Training Centre (Linux and Application Software)

ELCOT has established a 300 seater Computer Training Centre at Chennai and 25 seater Training Centres at all district headquarters. About 18,000 Government employees have been trained so far.

### <u>CHAPTER – III</u>

### TAMIL NADU e-GOVERNANCE AGENCY

Tamil Nadu e-Governance Agency (TNeGA) is a State Nodal Agency for all e-Governance initiatives of the Government of India. It also acts as the support agency of the Government of Tamil Nadu in all areas of e-Governance and help in Programme Management of the schemes with Capacity Building.

### e-GOVERNANCE PROJECTS

#### Pilot e-District

Districts are the primary delivery channels for Government administration to deliver a large number of services to the citizens; therefore e-Governance can significantly improve Government service delivery at the grass root level. e-District has been envisaged by Government of Tamil Nadu as automation of workflow and internal processes of District Administration with the possibility of seamless integration of various departments including Revenue, Adi Dravidar and Tribal Welfare, Backward Classes & Most Backward Classes Welfare, Social Welfare, etc., for providing services to the citizens. This project is of paramount importance to Government as it would help in creating an automated workflow system for the district administration and help in providing efficient department services.

This is implemented initially in the five districts of Ariyalur, Perambalur, Coimbatore, Tiruvarur and Krishnagiri. The Nilgiris District has also been included as Pilot e-District. Under this project the District Collectorates, Revenue Divisional offices and Taluk offices/ Block Development offices are computerized and connected by State Data Centre through Tamil Nadu State Wide Area Network. Hardware have been supplied and installed in all these offices. The Revenue Inspectors and the VAOs will also be provided with computers soon. Several applications have been developed for delivery of Government services through internet and Common Service Centre.

Under the e-District Project the following services of various departments are provided to the citizens.

### (1) e-District Application for Backward Classes and Most Backward Classes

The District Backward Classes Welfare Offices in the pilot e-Districts have been computerized and the grant of Postmatric scholarships to Backward Classes and Most Backward Classes students online was launched in the first phase. The students by using their ID can verify the status of their application at any Common Service Centre. This transparent approach enables the department to know the number of scholarships granted / pending and also resolve any grievances of the students.

### (2) e-District Application for AD&TW Department

The Postmatric Scholarship Schemes of AD&TW have been launched.

# (3)e-District Application for Social Welfare Department covers:

- Poor women Marriage Assistance Scheme
- Widow Remarriage Assistance Scheme
- Marriage Assistance Scheme for Daughters of Poor Widows

- Marriage Assistance Scheme for Orphan Girls
- Inter-Caste Marriage Assistance Scheme
- Girl Child Protection Scheme

### (4) e-District Application for Revenue Department

The on-line services of Revenue Department to be delivered through CSC and Internet have been implemented in Krishnagiri District. Citizen can apply for and receive digitally signed certificates without having to visit a Government Office.

- No Graduate in the family
- Destitute Woman Certificate
- Income Certificate
- Community Certificate
- Nativity Certificate

### **COMMON SERVICE CENTRES**

This Government, realizing the basic needs of the common man has taken steps to provide all Government Services to the common man in his locality through common service delivery outlets and ensure efficiency, transparency and reliability of such services at affordable costs. Accordingly, our Honourable Chief Minister has taken necessary steps to establish sufficient number of Common Service Centres in rural areas.

### **CAPACITY BUILDING**

The Capacity Building scheme is intended to draw e-Governance Roadmap for departments and Training component for Government Officials to self-sustain the e-Governance projects. There are certain Mission Mode Departments identified by Government and Roadmap prepared. Various levels of Training like e-Governance Sensitisation, Project Management, Computer orientation program are also covered. A State e-Mission Team (SeMT) has been created in TNeGA with a group of Consultants to assist the Government in implementing Capacity Building.

### State e-Mission Team (SeMT)

 SeMT is established to help the line departments to implement their e-Governance initiatives that are aligned with NeGP goals.

- SeMT will act as an internal advisory body to all mission mode departments and work closely.
- SeMT will assist the department in the creation of Project e-Mission Team or e-Team to augment the rollout of citizen services in online modes and through CSCs.
- Help department to create e-Governance road map and departmental e-Governance action plan with time line for roll out of all its citizen services phase by phase through online and CSCs.
- Assist the departmental employees in building their capacity to handle all the rollout of services through online and CSC modes in specific time frame by taking complete ownership.
  - The following Consultants constitute the SeMT:

Principal Consultant

Senior Consultant (Technology Management) Senior Consultant (Change Management) Consultant (Technology Management) Consultant (Programme Management) Consultant (Financial Management)

### National Informatics Centre (NIC)

The State Government acknowledges the pioneering role played by NIC in sowing the seeds of e-Governance in Tamil Nadu. NIC, under the Department of Information Technology of the Government of India, is a premier Science and Technology Organization, at the forefront of the active promotion and implementation of Information and Communication Technology (ICT) solutions in the Government.

NIC has driven e-Governance in the country for the last three decades building a strong foundation for better and more transparent Governance and assisting the Government endeavour to reach the unreached.

NIC has leveraged ICT to provide a robust communication backbone and effective support for e-Governance to the Central Government, State Governments, Union Territories Administration, districts and other Government bodies. It offers a wide range of ICT services. This includes NICNET a Nationwide Communication Network with gateway nodes at about 53 departments of the Government of India, 35 States / Union Territories Secretariats and 603 District Collectorates to service ICT applications.

NICNET has played a pivotal role in de-centralised planning, improvement in Government services, wider transparency of national and local Governments and improving their accountability to the people

### <u>CHAPTER – IV</u>

### **IT INFRASTRUCTURE**

IT Infrastructure comprises tools, facilities and resources that are needed for advanced collaboration and includes integration of various technologies such as Internet broadband channels, computing power, bandwidth provisioning, data storage, grid based resource sharing etc.

In order to provide seamless service, the following infrastructure has been created :

a) State Data Centre (SDC)

- b) ELCOT Data Centre
- c) NIC Data Centre
- d) Tamil Nadu State Wide area Network (TNSWAN)

#### Back end

As part of Mission Mode Projects and through State Government funded projects, each Government Department has to undertake an "AS IS" study, Government Process Reengineering study and a "TO BE" study, and develop software which can make services of the department available to Citizens at their doorstep. As far as possible, Government will use only Open Source Technology in application development.

### Front end

The Citizen / Business should be enabled to get information services or transactional services from various departments from the confines of his home, browsing centre, Common Service Centre (CSC) or office through the internet.

The interface for the Citizen to avail these services shall be the State Portal. The **State Portal www.tn.gov.in** is ready for launch along with the **State Services Delivery Gateway (SSDG), and e-Forms.** 

### CONNECTIVITY

# Tamil Nadu State Wide Area Network (TNSWAN) – Vertical Connectivity

ELCOT has set up Tamil Nadu State Wide Area Network at a cost of Rs.181.69 crores.

TNSWAN core network has 708 nodes (POPs-Point of Presence), This Network links all the Government departments to provide Voice, Data and Video connectivity for improving the delivery of services to the public and for improving the response-time and transparency.

# Tamil Nadu State Wide Area Network (TNSWAN) – Horizontal Connectivity

Government Departments have to get connected to the TNSWAN POPs to come under the SWAN intranet, to roll out their applications and also to avail other services such as voice, internet, Video Conferencing etc.

Horizontal connectivity is being provided to about 5000 last mile offices of various departments such as Commercial Tax, TWAD, TNHSP, Treasury, Registration, Employment & Training, Forest, TNeGA, State Health Society, TNHB, Survey, TANCEM etc.

### **Broad Band Connectivity**

ELCOT had floated an open rate contract tender for Broad Band connectivity and finalized BSNL as the service provider for the same. As on date, broad band connectivity have been provided to about 7000 Government offices including schools.

#### National Knowledge Network

The NKN is a Government of India initiative comprising of an ultra-high speed CORE (multiples of 10 Gbps) intranet, connecting academic institutions across India. Participating institutions at the Edge will connect to the National Knowledge Network seamlessly at speeds of 1 Gbps or higher. The entire network will seamlessly integrate with the global scientific community at multiple gigabits per second speed.

Government of Tamil Nadu will take advantage of NKN to improve the e-Governance efforts as also encourage all education institutions to be part of this network.

### **Right of Way Policy**

Government have laid down guidelines specifying the terms and conditions for the grant of permission for the use of public right of way by any private or public sector applicant that proposes to lay Optic Fibre Cables (OFC) along the National and State Highways and other roads in the State of Tamil Nadu.

### <u>HOSTING</u>

### State Data Centre

ELCOT has set up the State Data Centre (SDC), one of the core infrastructure for supporting e-Governance initiatives of NeGP (National e-Governance Plan). The SDC will consolidate services, applications and infrastructure to provide efficient electronic delivery of G2G, G2C and G2B Services. State Data Centre would provide much functionality via TNSWAN (Tamil Nadu State Wide Area Network) and CSC (Common Service Centre).

All applications of Government will be hosted at the SDC, in addition to the existing ELCOT Data Centre and NIC Data Centre. Government will also be exploring the possibility of establishing a Data Recovery Centre for mirroring the SDC.

### <u>CHAPTER – V</u>

### POLICIES

### e-Governance Policy

Mere automation will not lead to efficiency in Government processes. A focused public policy with a guided approach to output aimed at e-Governance is necessary to improve productivity levels within Government. An e-Governance policy is necessary to provide visible parameters and a clear vision. The Government will be shortly launching an e-Governance Policy.

While an e-Security policy is in place, its implementation will be given attention to. Similarly, the e-Waste policy has to be implemented. The Government will pro-actively engage the Citizens in all its e-Governance initiatives following the Citizen Engagement Guidelines of the Government of India.

### **Electronic Services Delivery Bill**

The Government of India is in the process of introducing a Bill in Parliament to mandate Electronic Services Delivery to Citizens within a specified time frame, during 2011-2012. A draft Bill has been placed in the public domain for inputs and suggestions.

### <u>CHAPTER – VI</u>

### <u>e-GOVERNANCE INITIATIVES</u> <u>FACILITATED BY I.T. DEPARTMENT</u> <u>FOR OTHER DEPARTMENTS</u>

### (I) Hardware procurement

The Government have approved ELCOT as the Optional Procurement Agency for all Government departments and their agencies to procure IT and IT related products and services from the market.

An innovative e-procurement policy that is open and transparent and encourages competition among vendors has ensured high quality products at costs which is 20-30% lesser than the market price.

### (II) Software development

ELCOT, TNeGA and NIC have been providing active support to the Government departments for their software needs by studying their requirements, preparation of Request for Proposal (RFP), floating of e-tenders and selection of software developers. ELCOT undertakes a Software Development Life Cycle (SDLC) approach, such that a complete documentation of the entire development to rollout is captured and documented.

### **DEPARTMENT-WISE e-GOVERNANCE INITIATIVES**

1) Adi Dravidar & Tribal Welfare Department (http://edistrict.tn.gov.in)

A web based scholarship system for Adi Dravidar & Tribal Welfare Department is in operation. The system has been implemented in all the Districts covering 3470 institutions benefiting more than 2.60 lakhs students.

### 2) Agriculture Department

AGRISNET - a software for Agriculture Department aims at delivering single window information and services to the farmers. It also provides alerts on crop information, climatic conditions etc., to the farmers. (http://www.tnagrisnet.tn.gov.in/website/index.php)

### 3) Animal Husbandry, Dairying & Fisheries Department

A Rs.7.00 crore "seamless communication project" which provides communication using VHF sets between fisherman boat and shore station especially in times of distress, enabling better search, rescue and relief operations is in place.

# 4) BC, MBC & Minorities Welfare Department (http://edistrict.tn.gov.in)

The District Backward Classes Welfare offices in the pilot e-Districts have been computerized making the grant of Post-matric scholarships to Backward Classes and Most Backward Classes students totally online. The students by using their ID can verify the status of their application at any Common Service Centre. This transparent approach enables the department to know the number of scholarships granted/ pending and also resolve any grievances of the students.

#### Free Cycles for Plus One Students

Free Cycles Distribution System has been developed for the BC&MBC Department. All the Government and Government aided schools will directly log into the system and feed the information of the students enrolled in their schools. This application paves way for assessing the requirement, procuring and monitoring the distribution.

### 5) Co-operation, Food & Consumer Protection Department (http://www.consumer.tn.gov.in)

ELCOT has created a state level Family Card Database for about 2 crore families in Tamil Nadu, and has hosted the same online at ELCOT server. Currently, the District Collectors have started using it for various purposes.

### **Central Co-operative Banking Software**

ELCOT has developed a web based application software for automating the operations of the District Central Co-operative Banks and Urban Co-operative banks. This software has been installed in more than 1000 DCCBs/UCBs.

ELCOT has also developed web based application software for automating the operations of the 4500 Primary Agricultural Co-operative Societies (PACS).

### Hand Held Billing Machines

The procurement and supply of Hand Held Billing Machines to 28,500 retail outlets and Kerosene bunks under the Control of Registrar of Co-operative Societies and Tamil Nadu Civil Supplies Corporation was entrusted to ELCOT. ELCOT has supplied Hand Held Billing Machines to 1411 ration shops and kerosene bunks in Chennai city. As on date, ELCOT has received orders for supply of Hand Held billing machines to 1156 Rations Shops in Krishnagiri and Thiruvallur districts.

### e-Services of Civil Supplies & Consumer Protection Department of Tamil Nadu

The primary objective of the project is to offer improved and efficient delivery of services to citizens by implementing web-based systems and providing connectivity to Taluk Supply Offices, District Supply Offices and all related offices. The systems will enable offering of various web-based services.

The above application has interface for citizens and the Department.

#### 6) Commercial Taxes & Registration Department

The Commercial Taxes Department has entrusted the task of developing and hosting application software enabling the Commercial Tax Dealers to register online and to file their monthly VAT Returns online. ELCOT has already developed the software which is under pilot run by the Commercial Tax department.

The URL, http://tnvat.gov.in provides the dealers, to file their online VAT monthly Returns along with facility for e-payment. They can also track the status of applications submitted online so as to avoid visit to Commercial tax Offices.

### 7) Energy Department

Government of India has launched a "Re-Structured Accelerated Power Development and Reforms Programme (R-APDRP)", in which Power Finance Corporation of Tamil Nadu has been designated as the Nodal Agency for the programme.

The programme envisages an IT backbone for Data Acquisition at Distribution level and based on the results monitored, steps are to be taken to provide and strengthen Electricity Distribution system.

Computerisation of Low-tension Billing and Collection have been implemented in Metropolitans, Corporations and Municipalities under Project BEST (Billing of Energy Services in TNEB) Scheme.

### 8) Environment & Forests Department

### Online Consent for TNPCB (www.pcboac.tn.nic.in)

NIC, Chennai, has developed a web based application for online filing of application for consent for the Tamil Nadu Pollution Control Board (TNPCB).

This software helps the industries to submit the applications anytime anywhere. The system also has the facility for the District offices to enter the details of each application at every stage of the back office operation.

### 9) Finance Department

#### e-Pension system

The "e-Pension" System developed for the Pension Pay Office is an Intranet based workflow model system which handles all the stages of processing right from the receipt of Pension application from AGs office till the sanction of Pension, making life comfortable for the Pensioners.

# Automated Treasury Bill Passing System (Karuvoolam-ATBPS)

A web-based application has been developed for the Department of Treasuries and Accounts. This application simplifies the work and the bills can be audited across the counter and passed on the same day. Reports can be generated and manual register can be dispensed with.

### **10)** Health & Family Welfare Department

### Health Management Information System (HMIS)

Health Management Information System (HMIS) is a centralised web-based application for all Governmentrun secondary care hospitals and medical colleges under Tamil Nadu Health Systems Project developed at a cost of Rs. 60.00 crores. The broad objective of the project is to use ICT in improving the ability to collect, store and analyze accurate health data across the State. The project was conceptualized to provide critical health data across the health chain for quick and timely intervention by health Directorates. Currently, 43 secondary care hospitals have been brought under TNSWAN connectivity, and expects to connect 272 hospitals in 2011-2012. The system enables creation of electronic patient records and Management Information System (MIS) for Doctors.

# Pregnancy and Infant Cohort Monitoring & Evaluation System (http://picme.tn.nic.in)

An online monitoring system has been developed, which helps to monitor the health status of Pregnant Women registered with any Primary Health Centre (PHC) in the rural areas of Tamil Nadu and also the infants born to these women.

### **11) Higher Education Department**

A system has been created which helps the Citizens to get the basic details of around 450+ Polytechnic Colleges and 450 Engineering Colleges. This web-based application was designed and hosted with the data provided by the Directorate of Technical Education (DoTE). This portal has interfaces for students, Citizen and the Polytechnic Colleges. (http://intradote.tn.nic.in)

#### 12) Home, Prohibition & Excise Department

# Crime and Criminal Tracking Network System (CCTNS)

Crime and Criminal Tracking Network System (CCTNS) has been approved as one of the Mission Mode Project under NeGP. It aims at creating a comprehensive and integrated system for enhancing the efficiency and effectiveness of policing through a nation-wide networking infrastructure for evolution of IT-enabled-state-of-the-art tracking system around 'Investigation of crime and detection of criminals'. This will cover all the Police Stations in the State.

### 13) Housing & Urban Development Department

### Automation Software for Directorate of Town and Country Planning

DTCP has entrusted the development of application software to ELCOT for automating its operations in the area of Layout Approval and Building Plan Approval. The DTCP Software with full citizen interface is being developed.

#### 14) Highways and Minor Ports Department

Highways Department is in the process of standardizing and computerizing all the processes like traffic survey, estimation and preparation of BOQs, bidding, preparation of tender documents and agreements, measurements, billing, accounts, audit, etc. GIS is being used for Tamil Nadu Road Sector Project and also for Road Accident Data Management System.

### 15) Information Technology Department

### **ERP Software Development**

ELCOT has customized an ERP (Enterprise Resource Planning) solution in Linux open platform, enabling all operations of ELCOT anytime anywhere. This application can be extended to other Government departments after due assessment and customization.

### State Portal & Content Management System (CMS) for Govt. of Tamil Nadu (http://www.tn.gov.in)

The objective behind the State Portal is to provide a single window 'Any Time, Any Where' access to the

information and services of the State Government at all levels from State Government to District Administration or Panchayat level for the Citizens and Business.

The State Portal is developed based on State Portal Framework (proposed by DIT) and National Portal content structure, following the web content accessibility guidelines.

# State Portal, State Service Delivery Gateway (SSDG) & e-Forms Project

Government of Tamil Nadu through TNeGA is adopting a State Service Delivery Gateway (SSDG) which will act as an interface between Government and Citizen for the exchange of information and to deliver integrated Government services to the citizens. This along with the State Portal and e-forms will ensure a seamless interfacing between the Government and the Citizen. This Rs.16.13 crore project is ready for launch.

### 16) Labour & Employment Department

An online 24x7 web portal has been exclusively developed for the Employment Directorate, so as to

facilitate the registration of job seekers, vocational guidance, periodical collection and compilation of data and implementation of unemployment Assistance Scheme.

All the Employment Exchanges have been connected to the SDC through TNSWAN, and now the operations of the Employment Exchanges are totally online.

### Web-based Application Software for Construction and Manual Workers' Welfare Board

A web-based software application has been developed for the Construction and Manual Workers' Welfare Board for executing the various welfare assistance schemes and pension schemes.

### 17) Legislative Assembly Department

All Members of the Tamil Nadu Legislative Assembly have been provided with email IDs, so as to enable the public to contact their representative at any time to redress their grievances. The MLAs can make use of the e-mail IDs by accessing the website - http://mail.tn.gov.in

### 18) Municipal Administration & Water Supply Department

A comprehensive web application for Chennai Corporation covering a wide range of activities ranging from Municipal accounting, Works Management, Property Tax, Asset Management, Inventory and Stores Management, Land and Estate Management and so on has been put into use.

19) Planning, Development and Special Initiatives Department

# Data Management system for Chennai Metro Rail project

Chennai Metro Rail Limited has entrusted this project to ELCOT. This application software provides for document and information sharing among all project participants. It will ensure document storage, retrieval, consulting, reviewing, communication etc.

# Chennai Utility Mapping (http://gis-police.tn.nic.in & http://gis-bsnl.tn.nic.in)

The basic objective of this project is to develop a City wide Spatial Data Infrastructure (SDI) with capabilities that

will deliver maximum benefits to the utility agencies and to meet the current pressing needs of the City Administration in their respective areas. Various government organizations make use of the information available.

### 20) Public Works Department

### Hiring Services of IT consultants for Design, Developing and Implementing Enterprise Information Management System (EIMS) for TNIAMWARM

The Tamil Nadu Irrigated Agriculture Modernization and Water Bodies Restoration Management (IAMWARM) project is a multi-disciplinary project conceived by the Water Resource Organization (WRO) with the aim to improve the performance of irrigated agriculture. The project necessitates use of an Enterprise Information Management System (EIMS).

### 21) Revenue Department (http://edistrict.tn.gov.in)

### e-Services of Taluk Offices

 Web based systems for improved and efficient delivery of services to citizens by providing connectivity to Taluk Offices

- To apply online for services
- Providing Acknowledgement to the Citizen
- Facility to view application processing status

The services that are offered to the citizens are as under :

- View Chitta Extract by citizens
- View A Register Extract by citizens
- Verify Chitta Extract for Agencies
- Verify A Register Extract for Agencies
- Verify whether land is Government or Private

Services related to Land Records :

- To view and apply for the Chitta details
- To view and apply for the "A" Register details
- To apply for Patta Transfer
- View the application processing status

### District Revenue – Online filing for Certificates (http://edistrict.tn.gov.in/certificates\_csc)

The system facilitates online filing by Citizens to apply for Certificates along with requisite back office operations. The Citizens can currently apply for and receive digitally signed certificates like, No Graduate Certificate, Deserted Women Certificate, Income Certificate, Community Certificate, Nativity Certificate, without having to visit a Government office.

### CollabLand project

The basic objective of the Collabland software is

- To capture the details of the Ladder table
- To Print / View the FMB (Field Measurement Books)
- To Handle transactions like Sub Division and Merging
- To Integrate with the TamilNilam non-spatial information of the land – application so as to provide both non-spatial and spatial information of the data to the citizen.

# Anytime/Anywhere Land Records (http://eservices.tn.gov.in)

The main objective of the "Anytime / Anywhere Land Record" is to provide details on plots of land in Rural areas to Citizens over the Web.

### **Online Grievance Redressal System for Districts**

Handling Public Grievances is the one of the major activities being carried out by the District Administration as well as in all Government Departments. The online Grievance Redressal System developed by the Krishnagiri District Administration through NIC, Chennai, provides a facility to citizens to file a petition to the District Administration. The system also handles the necessary back office processing. The system enables effective monitoring of the grievances submitted by the Citizens to the District Administration. The web based Open source application is implemented in 27 Districts and more than 5.32 lakh petitions have been received so far.

# Web based Certificate Management System (http://taluk.tn.nic.in/eservicescms)

This system takes care of Birth / Death registration at all Villages of Tamil Nadu. It also provides a facility to record details of Community Certificate, Nativity Certificate, Legal Heir Certificate, Income Certificate.

### 22) Rural Development and Panchayat Raj Department

### NREGA Monitoring System (http://nrega.nic.in)

This web based system helps to effectively implement and monitor Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) in Tamil Nadu.

This Software has been implemented in all the 385 Blocks and 31 Districts. The Village level data is being captured at Block levels.

# Online Scheme Monitoring System (http://www.tnrd.gov.in)

The "Online Scheme Monitoring System" helps to monitor various Projects implemented by Rural Development Department. More than one lakh projects are executed across the state every year and the Amount spent on these projects is around Rs. 9000 Crores.

### 23) School Education Department

### Tamil Nadu Board Results (http://dge2.tn.nic.in & http://tnresults.nic.in)

This web based system disseminates exam results and marks details for Higher Secondary and SSLC Examinations including Supplementary Exams and Special Supplementary Exams which is published six times in a year.

### e-Service Register

Service Details of 1,03,712 Teachers pertaining to Directorate of School Education is in the process of digitization. Last quarter 35802 teachers' information were fed into this system. As of now 1,00,080 teachers' information is available.

Apart from the 6,892 schools, all the 32 Chief Educational Offices and 68 District Educational Offices are provided with User-IDs to feed the non-teaching staff information. Details including General Particulars, service details, family details, nominations, qualification details are available in the system.

Each school has been provided with a user-ID for entering the details.

### 24) Micro, Small and Medium Enterprises Department

# Online filing of Entrepreneur Memorandum Form Part I and Part II (http://www.msmeonline.tn.gov.in)

The objective of the system is to facilitate the Entrepreneurs to file online application for Entrepreneur Memorandum Form Part I, Part II and Capital Subsidy along with the necessary back office processing by the District Industries Centre.

# 25) Social Welfare and Nutritious Meal Programme Department

The District Social Welfare Offices in the pilot e-Districts have been computerized and the beneficiaries can avail the assistance under the following schemes online through e-District Project by TNeGA:

- Poor women Marriage Assistance Scheme
- Widow Remarriage Assistance Scheme
- Marriage Assistance Scheme for daughters of poor widows
- Marriage Assistance Scheme for orphan girls
- Inter-Caste Marriage Assistance Scheme
- Girl Child Protection Scheme

This transparent approach enables the beneficiaries to know the status of their application. The Government can also monitor the number of applicants benefited under various schemes.

# 26) Tamil Development, Religious Endowments & Information Department

The renowned Tamil books which have been dedicated to the Nation will be hosted in the Tamil Virtual Academy website.

### 27) Tourism and Culture Department

Various services of this Department have been computerized and the following services are offered to the Citizens:

- Online Reservation System
- Website For Tamil Nadu Tourism
- Hotel Management System (HMS)
- Tours Management System (TMS)
- Centralised Reservation System (CRS)
- Boat House Management System

### **28) Transport Department**

# e-Services for Transport Department (http://tnsta.gov.in)

For the benefit of the Citizens, the following online services are enabled through e-Services for Transport Department:

- Online filing of Learner's License Applications by Citizens
- Online filing of New Vehicle Registration applications by Dealers of Vehicles
- Online filing of Hire Purchase Agreement (Form 34) and Hire Purchase Terminations (Form-35)
- Online issue of Heavy Vehicle Driver's Training Course Attended Certificate
- Online Booking of Appointments to visit RTOs for Driving License related activities
- Online Registration of Grievances and track the status of Grievance
- Evaluate the Skill Test for Learner's License (STALL) through System to create more awareness of the Traffic signals and symbols.

### Government e-Procurement System of NIC (GePNIC):

NIC has developed a generic PKI enabled Government e-Procurement system, for implementation in the government offices across the country with the following objectives.

- Online Enrolment of the Government officials & the bidders
- Tender creation & Publishing
- Publishing of Corrigendum
- Publishing of pre-bid meeting documents
- Online bid submission/re submission
- Two Factor Authentication
- Facility for Online payment collection through bank payment gateway
- Encryption of bids submitted by the bidder using Digital Signature Certificate (DSC)
- Facility for single/two/multiple cover bid system
- Withdrawal of online bids
- Tender opening online
- Automatic evaluation of the financial bid

- Updation of the committee recommendations at each stage of the tender process
- Mail/SMS communication at various stages to bidders/Government officials
- Digital Signing file documents using DSCs
- Award of the Contract (AOC)
- Adheres to the guidelines of Central Vigilance Commission, Asian Development Bank & World Bank

IT Department will work with Finance Department and all other Departments to make use of this e-Procurement system.

### <u>CHAPTER – VII</u>

### **THRUST AREAS IN e-Governance**

### **Cloud computing**

Cloud computing is a new approach to computing that uses a shared resource to deliver computing that is consumed as a service. It involves delivering hosted services over the Internet. These services are broadly divided into three categories : Infrastructure-as-a-Service (<u>IaaS</u>), Platform-as-a-Service (<u>PaaS</u>) and Software-as-a-Service (<u>SaaS</u>). IT Department is exploring the possibility of enhancing e-Services through Cloud computing.

### **Internet Protocol Version 6**

The Internet operates by transferring data in small packets that are independently routed across networks as specified by an International Communications Protocol known as the Internet Protocol (IP) and all Information & Communication Technology (ICT) devices need an IP (Internet Protocol) address to communicate through Internet . At present, Internet Protocol Version 4 (IPv4) is being used. Due to the rapid growth of the ICT Sector, the unallocated pool of IPv4 addresses will get exhausted soon which may result in serious implications, therefore transition from IPv4 to IPv6 (Internet Protocol Version 6) has been suggested by the Government of India. A "National IPv6 Deployment Roadmap" policy document has also been released by the Government of India for migration from IPv4 to IPv6 by all Government departments, private organizations and other stakeholders in the country.

## Data Warehousing, Data Mining using Business Intelligence Software

Statistical data play a very vital role in planning and development. The Statistics wing of various Government Departments collect periodical data on daily, weekly, monthly, quarterly or yearly basis, from the Districts and Villages. This creates a massive amount of data. A vast amount of data is also generated through sample surveys and censuses.

The objective of the Government data warehousing project is to facilitate analysis of official statistical data

through Business Intelligence Software tools, and disseminating this information to make it accessible from anywhere over the web, which would greatly benefit planners, economists, researchers and businesses.

With this in mind, the Government of Tamil Nadu had issued orders for establishing a Data Warehouse which would disseminate greatly enhanced data, as well as tools, through the Tamil Nadu Government website, and would enable users to retrieve as well as analyse data.

The Government intends to take this forward and establish a framework under the Information Technology Department, using the latest sophisticated tools available for Data warehousing, data mining etc collectively called a Business Intelligence Software.

### Mobile Governance

Mobile phones have tremendous potential to expand the access to and reach of public services in India. The rapidly expanding subscriber base of mobile phone users in India can help in accelerating the use of modern information and communication technologies (ICTs) for improving governance and ushering in inclusive development.

Government will launch a project to take advantage of the very high mobile penetration in Tamil Nadu for providing certain services to the Citizens. Mobile phones enable anytime, anywhere access to and delivery of services – Bridging the last mile gap with no huge upfront investments and is especially suited for rural areas. Mobile delivery platforms are ideal for Government services, financial inclusion, micro credit, location (GPS) based services, etc.

Wide range of e-Government services ranging from Financial such as Mobile payments, Payment of fees for Government services, Operation of bank accounts, Micro-credit, etc. Public / Government Services such as Submission of e-Governance applications, Delivery of services, Grievance Redressal, Disaster management (alerts, response), Location based services (travel/route info, crime detection, disasters).

Government will work with NeGD to develop a mobile Government payment Gateway. The State portal will be made mobile compliant.

### Integrated Financial Management

Government will endeavor to install a software tool to provide consolidated and consistent information about the State Government's expenditure and receipts across the State. The major functions of the Finance Department, Directorate of Treasury and Accounts, Directorate of Pension and Office of the Accountant General, District Treasury and Sub-Treasury offices spread across the State will be in one web based loop.

### **Geographical Information System (GIS)**

GIS is a tool for managing, analyzing and decision making, by seamlessly combining both spatial and nonspatial data. Tamil Nadu Government shall adopt Geographical Information System (GIS) for planning and monitoring processes in all the districts of Tamil Nadu by developing and implementing standardized District and State Level GIS applications.

The Government have already sanctioned Rs.43.50 lakhs towards supply of hardware and hosting requirements of TNGIS. Adequate space, technical

manpower and recurring cost will be allocated for this purpose.

Information Technology Department will work in close coordination with the Planning, Development and Special Initiatives Department to realize the objectives of the Government of Tamil Nadu.

The following actions will be taken by Government for the effective implementation of GIS in Tamil Nadu.

- Establishment of TNGIS-TNSSDI following the footprints of NSDI model.
- Adequate infrastructure to host large volumes of spatial database at various scales at the State Data Centre.
- Adequate infrastructure to ensure initial software development and data preparation. etc.

#### Asset Management System

The Asset Management System is intended for creating and managing repository of the assets in an organisation. IT Asset Management is the collection of practices that combine inventory and financial aspects to support the IT life cycle management. Procurement, deployment, management and disposal of the asset component form the life cycle in the IT environment.

A generic Asset Management Software will be developed at a onetime cost for use of all Government Departments.

### **Facility Management Services**

IT infrastructure facilities like Hardware, Software, Connectivity are procured and installed by every department for delivering quick services to the citizens. The biggest challenge in continuing the services to the citizens is to support the IT infrastructures. All IT infrastructures have specific warranty, service periods and life cycle period. Beyond this period, these infrastructure facilities deteriorate if maintenance support is not in place. The Facility Management Services is the concept that ensures placing of support services to attack the issues and high availability of the IT infrastructure for continued services to the citizens. FMS will be put in place for the use of all Government Departments.

# National Land Records Modernization Programme (NLRMP)

Revenue Department, Survey and Settlement Department, Registration Department will submit a combined proposal for implementation of NLRMP Project. Information Technology Department will facilitate this project.

### **Technology Forum in Government**

Information Technology Department proposes to create a Technology Forum in Government to create awareness among decision makers on the latest in technology which has a bearing on their work.

### <u>CHAPTER – VIII</u>

# SOCIETY FOR ELECTRONIC TRANSACTIONS AND SECURITY (SETS)

SETS was set up for the purpose of nucleating, sensitising and developing provable security designs that can protect the information wealth of the country and that can be used in applications of Information Security products and services. SETS is the first organisation in India established in the Public-Private Partnership mode that is engaged in information security. SETS was registered as a non-profit society under the Societies Act of 1860 in May 2002.

The corpus of SETS is generated through one-time membership fees from Government, Public and Private Sector Corporate, R&D, and academia. Government of Tamil Nadu has contributed Rs. 60 lakhs towards this corpus.

### Advanced Facility for Information Security and Cryptology (AFISC)

An Advanced Facility for Information Security and Cryptology (AFISC), has been created at SETS with funding from Government of India, at a cost of Rs.24.5 Crore. The Government of Tamil Nadu has provided 2.9 acres of land at M.G.R. knowledge city, Taramani, Chennai under a long term lease agreement for construction of the building. The AFISC is targeted to become a Centre of Excellence in the field of Information Security and Cryptology. SETS has offered Consultancy services to organizations like BRBNMPL, (RBI Unit) and Tamil Nadu Government. SETS has contributed towards formulation of IT Security Policy for Tamil Nadu Government.

IT Department proposes to take advantage of the expertise of SETS in the area of Information Security, especially as an e-Security Policy is in place.

### <u>CHAPTER – IX</u>

### INFORMATION TECHNOLOGY SPECIAL ECONOMIC ZONE (IT SEZ) PARKS

In the IT Policy 2002, a blue print for developing Infrastructural initiatives for Knowledge Industry Township was laid down by the Hon'ble Chief Minister.

It was stated that, Knowledge Industry Townships (KITS) will be created in the IT highway in Chennai through Public Private Partnership. It was also envisaged to position Coimbatore, Madurai, Trichy, Tirunelveli and Salem as Tier II cities for promoting IT investments. Based on that vision, ELCOT has established IT SEZs in eight locations.

As per the above blue print, IT SEZs parks have been established by ELCOT in the following places:-

- 1. Sholinganallur in Chennai.
- 2. Vilankurichi in Coimbatore.
- 3. Ilandhaikulam in Madurai.
- 4. Vadapalanji-Kinnimangalam in Madurai.

- 5. Navalpattu in Trichy.
- 6. Gangaikondan in Tirunelveli.
- 7. Jagir-Ammapalayam in Salem.
- 8. Viswanathapuram in Hosur.

### Status of IT SEZ Parks:

#### **Chennai- Sholinganallur IT SEZ:**

For establishing IT SEZ at Sholinganallur in Chennai, Government have alienated 377.08 acres to ELCOT. Out of 377.08 acres, 215 acres have been allotted on lease basis to various Information Technology Companies. 80 acres of land have been allotted to M/s.Wipro, 50 acres each to M/s HCL & M/s Mahindra Satyam. M/s Sutherland have been allotted 15 acres and M/s CTS have been allotted 20 acres. In this IT SEZ, ELCOT has invested Rs.42 crores towards basic infrastructure. M/s. Wipro has completed 23 lakhs sq.ft. building with seating capacity of 18,000 employees and presently operating with 12,000 employees. Further construction of 5 lakhs sq.ft. is under progress. M/s.HCL has constructed 10 lakhs sq.ft. building and started operation with 4,000 employees. M/s. Mahindra Satyam has begun construction of 4.5 lakhs sq. ft. building and 80% of the work has been completed so far.

In this IT SEZ, 91.22 acres of land have been allotted for Open Space Reservation (OSR) and other infrastructure facilities and an extent of 92.36 acres of land is yet to be allotted.

### Coimbatore – Vilankurichi IT SEZ:

For establishing IT SEZ at Vilankurichi Village in Coimbatore, Government have alienated 61.59 acres of land to ELCOT. In this IT SEZ 9.5 acres of land each have been allotted to M/s.Wipro and M/s.Tidel Park Coimbatore Limited on lease basis.

In this IT-SEZ, ELCOT has invested Rs.19 crores towards basic infrastructure.

In this IT SEZ for Open Space Reservation (OSR) and other infrastructure facilities 16.40 acres of land have been allotted. In this IT SEZ 26.19 acres of land is yet to be allotted.

#### Madurai – Ilandhaikulam IT SEZ:

For establishing IT SEZ at Ilandhaikulam Village, 28.91 acres of land have been alienated by the Government to ELCOT. Basic infrastructural facilities as well as 50,000 sq.ft IT-cum-Administrative building have been completed. In this IT SEZ 6.75 acres of land (M/s.Honeywell Technologies Ltd. - 4.50 acres & M/s.Chella Software - 2.25 acres) have been allotted on lease basis to two Companies.

In this IT SEZ, ELCOT has invested Rs.7 crores towards basic infrastructure. ELCOT has invested Rs.18 crores, for construction of IT-cum-Administrative Building.

In this IT SEZ, initially 5 acres of land have been allotted to M/s. HCL Technology Limited on lease basis. But this Company has requested ELCOT to refund the lease amount as they are not interested to start their unit in this IT SEZ.

In this IT SEZ 8.16 acres of land have been allotted for Open Space Reservation (OSR) and other infrastructure facilities and IT cum Administrative building. In this IT SEZ 14 acres of land is yet to be allotted.

#### Madurai – Vadapalanji – Kinnimangalam IT SEZ:

For establishing IT SEZ at Vadapalanji Village, 245.17 acres of land have been alienated by the Government to ELCOT. Basic infrastructural facilities have been completed in this IT SEZ. In this IT SEZ 7 acres of land (M/s.Caliber point – 5 acres & M/s.Health Plan Systems (India) Pvt. Ltd. – 2 acres) have been allotted on lease basis to above two IT companies.

In this IT SEZ, ELCOT has invested Rs.15 crores towards basic infrastructure and Rs.12 crores for construction of Road over-bridge.

In this IT SEZ, initially 60 acres of land to M/s. HCL Technology Limited, 50 acres to M/s. Satyam Limited, 25 acres to M/s. Syntel Limited and 5 acres to M/s Sutherland Global Services Limited have been allotted on lease basis. But these companies have requested ELCOT to refund the lease amount as they are not interested to start their unit in this IT SEZ.

In this IT SEZ 57.02 acres of land have been allotted for Open Space Reservation (OSR) and other infrastructure facilities. An extent of 181.15 acres of land is yet to be allotted.

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#### Trichy – Navalpattu IT SEZ:

For establishing IT SEZ at Navalpattu Village in Trichy, Government have alienated 147.61 acres of land to ELCOT. Basic Infrastructural facilities as well as 50,000 sq. ft IT-cum-Administrative building have been completed.

In this IT SEZ 26 acres of land (M/s.Assist International Private Limited – 3 acres, M/s.Healthplan Systems (India) Pvt. Limited – 2 acres, M/s.I-Wave System Technology Pvt. Ltd. – 5 acres, M/s.Unlimited Innovations India Pvt. Ltd. – 5 acres, M/s.Zylog Systems Ltd. – 5 acres, M/s.I Link – 1 acre and M/s.WMS – 5 acres) have been allotted on lease basis to 7 IT/ITES Companies.

In this IT SEZ, initially 2 acres of land to M/s. HCL Infosystems Limited and 10 acres to M/s. Sutherland Global Services Limited have been allotted on lease basis. But these two companies have requested ELCOT to refund the lease amount as they are not interested to start their unit in this IT SEZ. In this IT SEZ, ELCOT has invested Rs.14.23 crores towards basic infrastructure and Rs.18 crores for IT-cum-Administrative Building.

In this IT SEZ 40.88 acres of land have been allotted for Open Space Reservation (OSR), other infrastructure facilities and IT cum Administrative building. In this IT SEZ 80.73 acres of land is yet to be allotted.

### Tirunelveli – Gangaikondan IT SEZ:

An extent of 500 acres of land have been allotted to ELCOT on lease basis by SIPCOT for establishment of an IT SEZ park at Gangaikondan village in Tirunelveli. 290 acres have been notified as SEZ area. Basic infrastructure facilities for 100 acres have been developed in this IT SEZ. 50,000 sq. ft. IT-cum-Administrative building have been completed in this IT SEZ.

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In this IT SEZ 102 acres of land (M/s.Syntel International Limited – 100 acres, M/s.Decan Services (P) Limited – 2 acres) have been allotted on lease basis to the above two IT companies. 25 acres of land have been allotted to M/s A&D cosmic Power Private Limited in non-SEZ area.

In this IT SEZ, initially 10 acres of land have been allotted to M/s. Sutherland Global Services Limited on lease basis. But, this company has requested ELCOT to refund the lease amount as they are not interested to start their unit in this IT SEZ.

In this IT-SEZ, ELCOT has invested Rs.12.76 crores towards basic infrastructure, and Rs.13.92 crores for IT-cum-Administrative Building.

In this IT SEZ, 142.00 acres of land have been allotted for Open Space Reservation (OSR), other infrastructure facilities and IT cum Administrative building. In this IT SEZ, 231.00 acres of land is yet to be allotted. Salem- Jagir Ammapalayam IT SEZ:

For establishing IT SEZ at Jagir Ammapalayam Village in Salem, 164.26 acres of land have been alienated by the Government to ELCOT.

In this IT SEZ, works for providing basic infrastructural facilities for 53.33 acres are under progress. In this IT SEZ 8.50 acres of land have been allotted to three IT/ITES companies (M/s.DB Professionals Ltd. – 3 acres, M/s.Mahima Technology Pvt. Ltd., Salem – 3 acres and M/s.GTP Infotech Solutions Ltd. – 2.5 acres) on lease basis.

In this IT SEZ, ELCOT has invested Rs.9.43 crores towards basic infrastructure.

In this IT SEZ, 16.45 acres of land have been allotted for Open Space Reservation (OSR), other infrastructure facilities and IT cum Administrative building. In this IT SEZ 28.38 acres of land is yet to be allotted.

#### Hosur –Viswanathapuram IT SEZ:

For establishing this IT SEZ at Viswanathapuram Village in Hosur, Government have alienated 174.47 acres of land to ELCOT. Basic infrastructural facilities are under progress in this IT SEZ. 27 acres of land (M/s.Okaya Infocom Pvt. Ltd., New Delhi – 10 acres, M/s.Tejas Networks Ltd., Bangalore – 5 acres, M/s.CRM IT Solutions Pvt. Ltd., Bangalore – 3 acres, M/s.CRM Infotech India Pvt. Ltd., Bangalore – 2 acres, M/s.Ascent Circuits Pvt. Ltd., Hosur – 5 acres and M/s.Nous Infosystems Pvt. Ltd. – 2 acres) have been allotted to six IT/ITES companies on lease basis.

In this IT SEZ, ELCOT has invested Rs.24.27 crores towards basic infrastructure.

In this IT SEZ, 66.22 acres of land have been allotted for Open Space Reservation (OSR) other infrastructure facilities and IT cum Administrative building. In this IT SEZ 81.25 acres of land is yet to be allotted.

#### Vellore and Villupuram IT Parks:

In order to establish, IT Parks at Vellore and Villupuram, the District Collectors of the respective districts have been instructed to identify suitable places.

Aggressive marketing for allotting lands will be taken up in 2011-2012 for attracting investments from IT/ITES companies in Chennai and other Tier-II IT SEZ locations, so that vacant lands will be leased out.

In order to overcome the sluggish and deteriorating conditions prevailing in the IT SEZs, the Government will try to improve the quality of the above SEZs and attract investments from Multi National Companies (MNCs) and local firms by allotting the remaining extent of land to the above firms to enable them to start their businesses. As per the directions of the Honourable Chief Minister, all steps would be taken for making Tamil Nadu a better place for IT investments than other States. As per the directions of the Honourable Chief Minister, similar action will be taken to create a conducive environment for the Multi National Companies (MNCs) and local firms to start IT/ITES Parks in other Districts also.

### **TN IT Help Desk**

A web based help desk has been set up to assist entrepreneurs in setting up IT units in Tamil Nadu.

### <u>CHAPTER – X</u>

### **ICT ACADEMY**

ICT Academy of Tamil Nadu (ICTACT) is an initiative of Government of India, Government of Tamil Nadu and the Confederation of Indian Industry (CII). ICTACT is an autonomous non-profit society. ICTACT is governed by an illustrious Industry leaders and bureaucrats from the Government of Tamil Nadu.

The objective of ICTACT is to train the Higher Education teachers of ICT domain, thereby benefiting their students to become Industry ready and employable.

ICTACT focuses at creating a knowledge ecosystem to provide an equal opportunity for the students of Tier I/II and III locations, thereby creating a new generation of talent pool which would benefit the ICT Industry in the state of Tamil Nadu as envisioned by the Honourable Chief Minister.

### <u>CHAPTER – XI</u>

### TAMIL VIRTUAL ACADEMY

#### INCEPTION

Tamil Virtual Academy was created to provide internet based education in Tamil for the Tamil Communities living in different parts of the globe as well as others interested in learning Tamil and acquiring knowledge of the history, art, literature and culture of Tamils.

#### ACADEMIC PROGRAMMES

At present Tamil Virtual Academy is providing Academic Programmes like Primer Education, Certificate Course, Diploma and Higher Diploma courses.

9773 candidates from 87 Countries have registered for different courses and 1280 certificates, 19 higher certificates, 235 Diplomas and 90 Higher Diplomas and 77 Degrees were awarded so far. All Diploma / Higher Diploma / Degree Programme Lessons are completed and made available in the TVA website.

### STUDY CENTRES

46 Study Centres in the following 16 countries namely India, USA, Canada, Malaysia, Srilanka, Mauritius, Switzerland, Germany, La Reunion, Australia, UK, France, Myanmar, South Africa, New Zealand, Fiji were established for the benefit of the Tamils. Now efforts are on to locate co co-ordinating centres in countries where there is a sizable Tamil population.

### **DIGITAL LIBRARY**

For the benefit of students registered for various courses of TVA and for the others, 406 books on Literature, Commentaries, Dictionaries, Tamil Technical Glossaries, Cultural and Suvadi (Palm Leaf) galleries have been made available in the Digital Library of TVA website.

### **RELEASE OF COMPACT DISC**

Under the plan for producing CD's of the lessons, CD for Primary, Basic, Intermediate and advanced level lessons, Learn Tamil, Tamil Karpom have been prepared and released for the benefit of students.

### MANUSCRIPT GALLERY

Old Tamil text manuscripts collected by Thiru U.V.Saminatha Iyer have been uploaded in the digital library with search facillity. Till date 6000 palmleaf manuscripts are available along with the text.

### **CULTURAL GALLERY**

Video-audio clippings on folk dance, temples, festivals, monuments, games are available.

#### TAMIL ENCYCLOPEDIA

10 volumes of Tamil encyclopedia, published by the Tamil Valarchi Kazhagam, Chennai have been uploaded in the TVA's web site along with head words search. Further, web enabling of Children's Encyclopedia is currently in progress.

### VIRTUAL CLASS ROOM

Lessons for teaching Tamil and Video lectures for B.A.Tamilology are hosted in the website. Also these have been made available in YouTube.

### TAMIL SOFTWARE DEVELOPMENT FUND

Tamil OCR, Tamil Handwriting, Electronic Dictionary, Tamil Corpus Analysis are the Tamil software developed under TSDF. Further, many Tamil Software have been developed under TSDF.

#### **CONVERSION FROM TAB/TAM INTO UNICODE**

All academic lessons by TVA have been converted from TAB/TAM into Unicode. Now e-books are being converted into Unicode compliant Tamil fonts.

#### **STANDARD FONTS**

The Government of Tamil Nadu has declared Unicode and TACE-16 as its standards. Now Unicode compliant Tamil fonts are under development with the required key Board Drivers for free use by all, especially Government Departments. This will be ready for launch shortly.

### PUBLICATION OF TECHNICAL GLOSSORY

About 2,50,000 technical terms compiled by various universities have been reviewed and grouped according to subjects published in 14 volumes.

Technical Terms 2,30,000 have been compiled and this will be uploaded in wikitionary. Theses terms will be released in CD form also.

### **BUILDING FOR TAMIL VIRTUAL ACADEMY**

Construction of the Ground Floor of Tamil Virtual Academy building is completed and at present Tamil Virtual Academy is functioning here. Construction of the first floor, a studio and an auditorium are under progress.

### <u>CHAPTER – XII</u>

### **ARASU CABLE TV CORPORATION LIMITED**

Arasu Cable TV Corporation Limited was formed by the Government of Tamil Nadu with a view to provide high quality cable TV service at a reasonable cost to the general public through the Local Cable Operators(LCO).

Four Digital Head Ends at Thanjavur, Coimbatore, Tirunelveli and Vellore and one Analog Head End at Mundiampakkam Village in Villupuram District have been established. Subsequently, the Corporation became defunct completely.

As per the historical orders of our Honourable Chief Minister, and as per the excellent thought blossomed to our Honourable Chief Minister, all sincere efforts have been taken for the immediate revival of the Arasu Cable TV Corporation for providing cable TV services at reasonable rates. The Government has appointed a Chairman and a Managing Director for the Corporation to oversee the revival and expansion activities of the Corporation. An amount of Rs.3.00 Crores has been sanctioned as ways and means advance to the Corporation for the above cause.

Advertisement has been released in Newspapers for Enrolment of Cable TV Operators (except Chennai) in Arasu Cable TV Corporation Ltd. There has been an overwhelming response from the Local Cable TV operators and till the last date of enrolment i.e. on 09.08.2011, 35,030 LCOs and 2,640 MSOs and in total 37,670 persons have registered themselves with ACTCL. In Tamil Nadu, there are about 40,000 Cable TV operators and out of this, 94% have applied for enrolment in Arasu Cable TV Corporation.

The digital Head Ends already established at Thanjavur, Tirunelveli, Coimbatore and Vellore are being revived and new Analog Head Ends are being installed in 16 Districts. ACTCL has proposed to take over the existing Control Rooms of private operators under its control to provide Cable TV services in 11 districts. Many MSOs having their own Control rooms have expressed their willingness to provide the Control rooms to ACTCL

As per the guidance of Honourable Chief Minister action is being taken to commence the Cable TV services at the earliest.

### <u>CHAPTER – XIII</u>

### NEW SCHEMES FOR THE YEAR 2011-2012

### MODERNISATION OF INFORMATION TECHNOLOGY DEPARTMENT

As a step towards modernization of the IT Department, it is necessary that the entire department be restructured and modern work environment be set up. A sum of Rs.23 lakhs has been proposed under the Part-II Scheme for the year 2011-2012. This will be a model for other departments to emulate.

### ENTERPRISE RESOURCE PLANNING (ERP) SOFTWARE FOR SECRETARIAT

It is proposed to introduce an Enterprise Resource Planning (ERP) Software – a paperless office in Information Technology Department of Secretariat. After due assessment and customization, it will be extended to other Departments of Secretariat. A sum of Rs.14.80 lakhs has been proposed under Part-II Scheme for the year 2011-2012.

### STATE SERVICES DELIVERY GATEWAY PROJECT

The SSDG covers various services of Government departments. The e-District applications developed by NIC is on open-source / open standards are manageable with SSDG funds. Legacy applications developed by 3<sup>rd</sup> party vendors require additional funds for re-architecturing, data migration, font conversion and professional support for which a sum of Rs.10.20 lakhs has been requested under the Part-II Scheme for the year 2011-2012.

### ANNOTATED CORPUS FOR TAMIL LITERATURE

Tamil Virtual Academy has enriched with Tamil literature. In order to provide linguistically annotated Tamil corpus, a sum of Rs.25 lakhs has been requested under the Part-II Scheme for the year 2011-2012.

### SPEECH DATABASE

Tamil Virtual Academy has started Virtual Teaching for students, for which TVA has to produce more speech

data for language and literature studies. TVA is in the process of developing a common speech database for teaching of Tamil language and literature. A sum of Rs.10 lakhs has been requested under the Part-II Scheme for the year 2011-2012.

### **AUDITORIUM EQUIPMENTS**

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Tamil Virtual Academy has its own building established with an Auditorium. Certain facilities are required for the Auditorium.

A sum of Rs.17 lakhs has been requested under the Part-II Scheme for the year 2011-2012.

### R.B. UDHAYAKUMAR Minister for Information Technology